

Strengthening Maryland's Position as the Regional Leader in Job Creation: Expanding Maryland's STEM Industries

Maryland is leading the region in job creation. Together with our dynamic private sector we're creating jobs faster than any other state in the Mid-Atlantic and we've recovered over 99% of the jobs lost in the national recession. Governor O'Malley is determined to make sure Maryland remains a regional leader in job creation.

Maryland is home to the nation's second highest concentration of STEM workers and has one of the fastest STEM job growth rates in the nation. Because STEM jobs are expected to grow nearly twice as fast as non-STEM jobs in the next five years and will likely continue to outpace their non-STEM counterparts in wages, Governor O'Malley is determined to continue his focus on creating STEM jobs and to continue working to prepare Marylanders for those jobs. Below are some of the things he's doing to grow our STEM industries and to train Maryland workers for these in-demand jobs:

1. Boosting Life Sciences Industries

- **Life Sciences Advisory Board:** In 2007, Governor O'Malley and the General Assembly established the Maryland Life Sciences Advisory Board and tasked the Board with developing a comprehensive strategic plan to grow Maryland's life sciences industries.
- **BioMaryland 2020:** In 2009, the Board released the BioMaryland 2020 Plan -- a \$1.3 billion, 10-year plan to expand our life sciences industries through targeted investments. To date, the State has invested nearly \$600 million to fund incubators, research, tax credits and other initiatives.
- **Maryland Biotechnology Center:** Created by Governor O'Malley in 2009, the Center is a one stop shop for launching, relocating, or growing a biotech business in Maryland.

2. Investing in STEM Education and Training

- **Record Funding:** Even as other states have cut back funding schools during the national recession, Governor O'Malley has invested record funding in Maryland's #1 ranked public schools.
- **STEM Curriculum:** Maryland was the first state in the nation to set specific STEM education standards telling teachers not just what STEM is, but how to teach the subjects. The results are telling: last year Maryland students had record participation and success in AP STEM exams.
- **Project Lead the Way:** Maryland is an active partner in PLTW's Pre-Engineering and Biomedical Science programs. (PLTW is a non-profit that provides STEM curricular programs in schools throughout the country.)
 - **Biomedical Sciences:** In 2008, Maryland was one of the first states in the nation to implement PLTW's Biomedical Sciences Program. In its first year, 181 students were enrolled in the program; last year over 1,340 Maryland students participated.
 - **Pre-Engineering:** Nearly 130 schools across 20 school districts participate in PLTW's Pre-Engineering Program. More than 11,500 Maryland students took challenging courses in civil, aerospace and biotechnical engineering through the program last school year.
- **Early College:** This year, Governor O'Malley created the Early College Innovation Fund to create and expand early college access programs that provide accelerated pathways for students in the STEM disciplines.
- **EARN:** The EARN initiative, signed this year, closes the gap between the demands of Maryland's employers and the skills of Maryland workers. Governor O'Malley's FY2014 budget invests \$4.5 million to create workforce training programs in the high-demand fields of construction, manufacturing, cyber and healthcare.

3. Supporting Promising Companies

- **Incubators:** Maryland is home to 28 business incubators, which support promising early-stage companies.
- **InvestMD:** Created by Governor O'Malley in 2011, InvestMD invests in promising seed- and early-stage companies throughout the state. In 2012, the State raised \$84 million through the nation's first online tax credit auction for InvestMD. Those dollars can leverage up to 5 to 10 times that amount in private equity dollars, or roughly \$350 - \$700 million. In FY2014, nearly \$28 million will be invested through InvestMD.

4. Encouraging Private Sector Investment

- **Biotechnology Tax Credit:** Our Biotech Tax Credit spurs innovation in Maryland's world-class biotechnology and life sciences sector. Through 2013, Maryland has invested in more than 60 companies creating over 250 new biotechnology jobs leveraging \$96 million in additional investment. This year, Governor O'Malley's budget increases out investment in the program by 25%, to \$10 million.
- **Research and Development Tax Credit:** Maryland is #1 in the nation for research and development per capita. Our R&D tax credit ensures we remain leaders in research through over \$70 million in investments in more than 380 Maryland companies to date. This year we increased funding for the program by 33%, to \$8 million.
- **Cybersecurity Investment Tax Credit:** New this year, the \$3 million Cyber Tax Credit ensures that Maryland, home to the National Cyber Center of Excellence, remains a national leader in cybersecurity.